State of the Estuaries 2003

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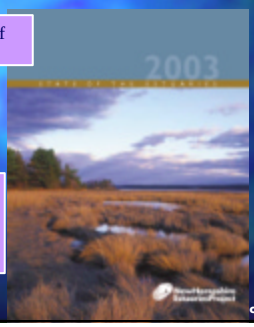
NH Estuaries Project
October 20, 2003

State of the Estuaries Report

Status and trends of 12 key indicators



Coastal watershed partnerships

Case study on protecting habitats around Great Bay

Case study on shellfish in Hampton/ Seabrook Harbor

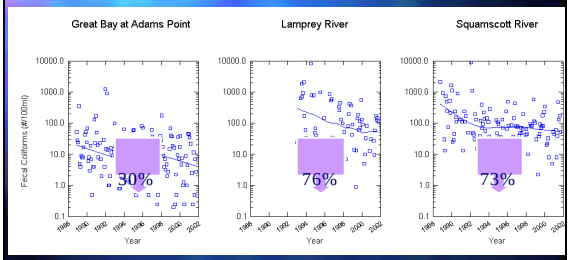
Major Themes of Report

- NH's estuaries are in good condition
  - Water quality has improved
  - Conservation efforts have been successful
- However,
  - Shellfish resources are declining
  - Development pressures are growing

Improvements in Water Quality

Bacteria
Toxic Contaminants
Dissolved Oxygen

Dry-weather bacteria concentrations



Toxic Contaminants in blue mussel tissue

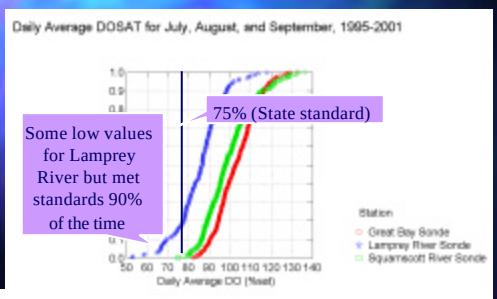
PCBs have declined 49%

DDTs have declined 87%

PAHs have increased 30%

Mercury is unchanged

Dissolved Oxygen



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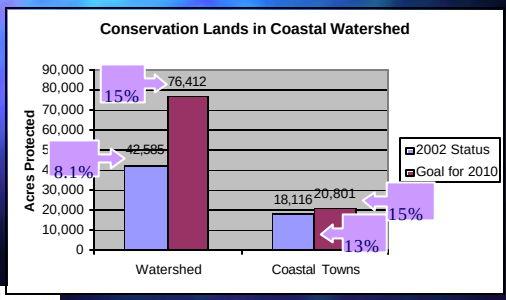
Conservation Successes

Land Protection
Unfragmented Lands
Salt Marsh Restoration
Eelgrass Coverage

Conservation Lands in Coastal Watershed



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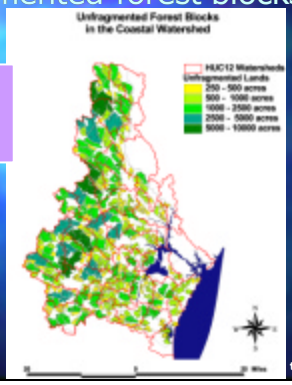
Unfragmented forest blocks

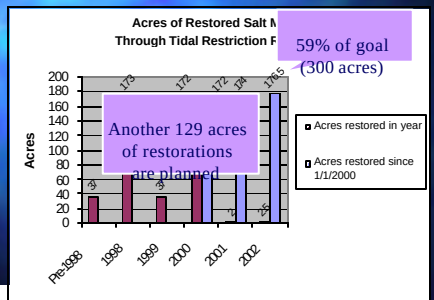
Unfragmented blocks cover 50% of watershed



9.6% of unfragmented blocks are protected from development

the Estuaries 2003

Restored salt marshes



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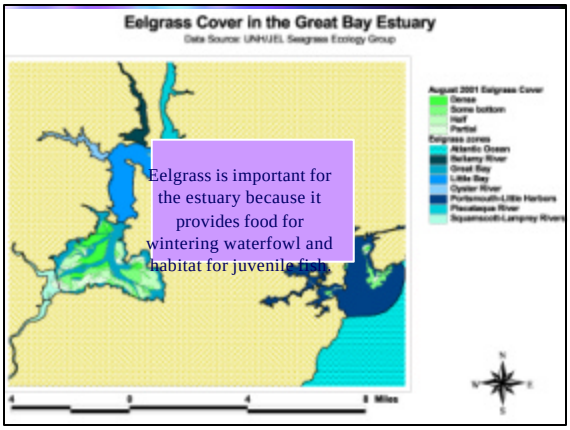
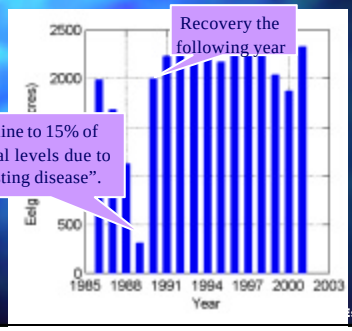


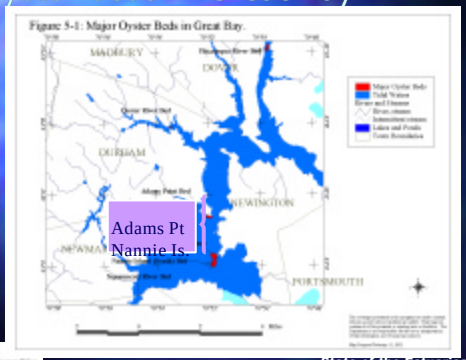
Eelgrass recovery

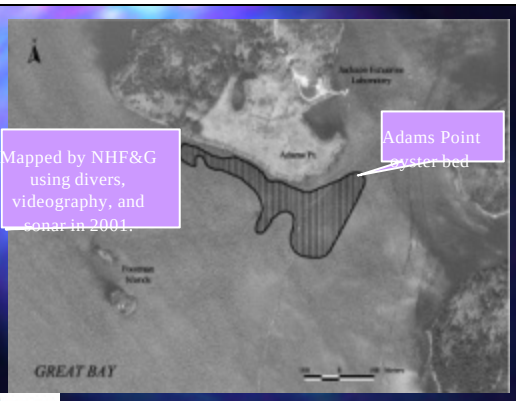


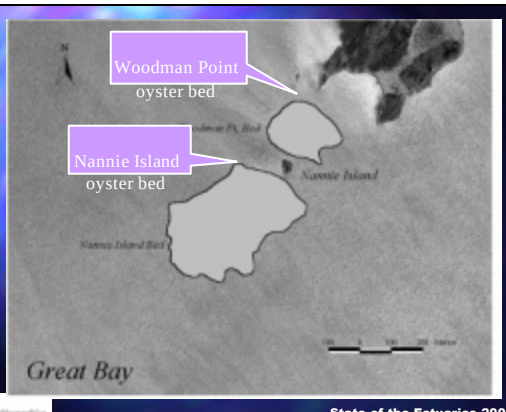
Shellfisheries in decline

Oysters
Soft-shell clams

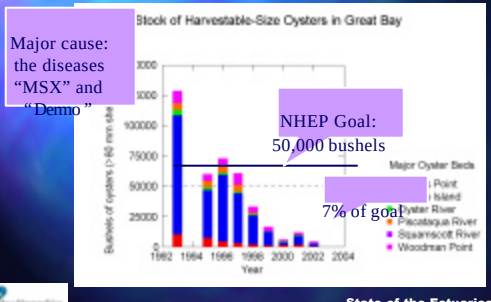
Oyster beds in Great Bay





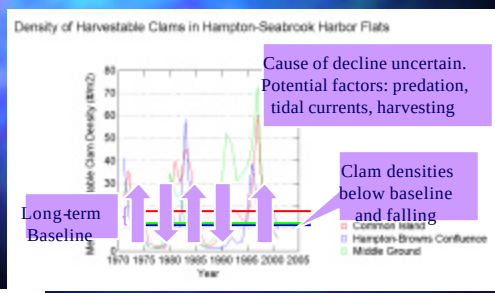


Abundance of harvestable oysters in Great Bay



Clam flats in Hampton/Seabrook Harbor

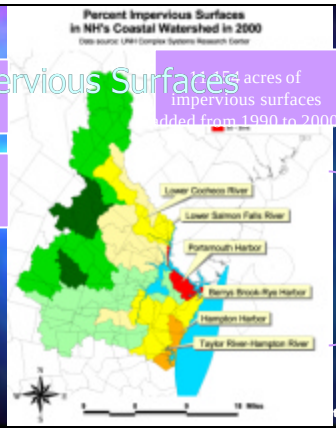
Abundance of soft-shell clams in Hampton/Seabrook Harbor



Development pressures

Impervious Surfaces
Sprawl
Nutrient enrichment

Impervious Surfaces



Coverage in 1990: 4.7%

Coverage in 2000: 6.8%

[illegible] acres of impervious surfaces added from 1990 to 2000

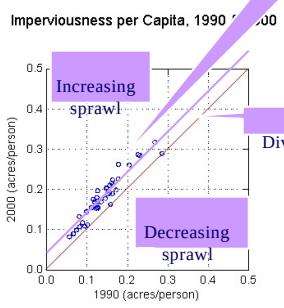
6 watersheds with >10% impervious surface cover

Sprawling growth

25 of 42 towns had increasing imperviousness per [illegible]

Imperviousness per person in 1990: 0.15 acres/person

Imperviousness per person in 2000: 0.20 acres/person



Increasing nitrogen concentrations

The major sources of nitrogen are all related to population growth and development

No signs of eutrophication yet but we do not know how much is too much

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Significant increase over the past 12 years

Conclusions for 2003

- NH's estuaries are in good condition
  - Water quality has improved
  - Conservation efforts have been successful
- However,
  - Shellfish resources are declining
  - Development pressures are growing

Additional Information

- More detailed Indicator Reports
- NHEP Monitoring Plan

Available at:
webster.state.nh.us/nhep/Monitoring/monitoring.htm

Additional Questions

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